

Semester-II notes 2012-13

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editorial

The Second Semester, 2012-13 witnessed BITS Pilani marching ahead with myriad of developments on every front. Keeping in with the quintessentially eventful ambience of the campus, significant and variegated events kept unfolding and thrilling us as the days progressed.

This year over 1,44,000 candidates appeared for the online test BITSAT 2013 for 2125 seats in different campuses of BITS Pilani. The semester started with a euphoric and warm welcome to the freshers including the 18 Board toppers of Class XII of 2013 who have been admitted in various programmes at BITS Pilani and its other campuses under the Direct Admission category.

The semester also vouchsafed the institute making a robust march towards translating the ideas put forth by the various task forces formed under Mission 2012 into reality. Now for taking the institute further on to a more enterprising voyage in pursuit of further excellence and innovations, the institute has launched a first of its kind multi-million dollar cross-campus technology initiative named **BITSCONNECT 2.0**. Pioneering a unique

→ BITSCONNECT 2.0 press meet



model of multi-campus education in India, the initiative comprises Immersive Telepresence, High-definition Video Conferencing and Live Streaming technologies that are set to transform the learning experience by connecting all the campuses at an unprecedented scale.

The institute had its moments of further glory when BITS signed the **MoUs** with **La Trobe University**, a multi-campus university based in Victoria, Australia for student and staff exchange program. This agreement will provide opportunity to students and staff from both the Universities to visit each other for a period of 6 months to 1 year to participate in study or research project. That research at BITS has also taken a big stride

forward, got further evidenced in this semester with the Institute's faculty members bagging 44 projects worth 7.95 crore INR. The Department of Biological Sciences and Department of Chemistry received a prestigious project each under **SAP** (Special Assistance Programme) for Departmental Research Support (DRS) from University Grant Commission for worth rupees 70.75 and 70 lakhs respectively for five years.

→ MoU signed with La Trobe University



Akin to the preceding semesters, this semester also, both teachers and students kept winning laurels to the Institute. **Dr. Subhashis Gangopadhyay**, one of our faculty members, won the prestigious logo competition for **Interdisciplinary Surface Science Conference (ISSC-19)**, East Midlands Conference Centre, Nottingham, UK during March 3-7, 2013. As always, this semester also saw our students bringing further glory to the Institute by winning prestigious awards and prizes in various competitions. Our student, **Samudrala Sanjay Athreya** (2009C2PS709P) was selected as one of the 100 young leaders across the globe to become a **StartingBloc Fellow** and was invited to attend the **Institute for Social Innovation 2013** held during 14-18 February 2013 at Los Angeles, U.S.A. Another student, **Siddharth Seth** (2009B4A3713P) received **Mantra Award for Outstanding Leadership** by BITSAA and he was selected for incubation at Massachusetts Institute of Technology Global Start-up Labs, during 17 June – 26 July, 2013. **Siddharth Seth** was also selected as **Author of Change** by National Social Entrepreneurship Forum (NSEF) on June 1, 2013.

In addition to this, many faculty members of the Institute visited several universities and institutes in India and abroad to broaden their horizon of knowledge and share their experiences beyond boundaries. Moreover, during this semester a good number of distinguished speakers and experts visited our Institute and delivered talks and lectures to share their knowledge with BITS fraternity. To cap it with further distinction, the

semester also witnessed faculty members from various disciplines being rewarded with grants from several prestigious agencies for carrying out research projects in their respective areas.

Both the faculty and the students are gearing towards celebrating the Golden Jubilee of our institute in 2014 under the seasoned leadership of Prof. Bijendra Nath Jain, Vice-Chancellor, and the dynamic stewardship of Prof. G Raghurama, Director, BITS Pilani – Pilani Campus.

Visit of Sri B.K. Birla and Smt. Sarala Birla

Noted industrialist and Member of the Board of Governors, Sri B. K. Birla accompanied by Smt. Sarala Birla, Smt. Neerja Birla and other family

→ Visit of Birla family



members visited the Institute on Sunday, 7th April 2013. Besides seeing the construction of new academic block, they saw the Formula type race car and All Terrain Vehicle designed by the Inspired Karters team. Birla family showed keen interest in the social development initiatives undertaken by the NIRMAAN and NSS Wing of the Institute.

BITSCONNECT

BITSCONNECT 2.0: multi-million dollar cross-campus technology

BITS Pilani along with BITSAA, its global alumni association, launched a first of its kind multi-million dollar cross-campus technology initiative named BITSCONNECT 2.0. Pioneering a unique model of multi-campus education in India, the initiative comprises *Immersive Telepresence*, *High-definition Video Conferencing* and *Live Streaming Technologies*, that are set to transform

→ Inauguration of BITSCONNECT 2.0



the learning experience by connecting all campuses at an unprecedented scale. This University-Alumni initiative was launched simultaneously at all the three campuses of BITS, Pilani viz. the Pilani, Goa and Hyderabad campuses, while being connected to Cisco's offices in San Jose and Boston, jointly by Prof. Bijendra Nath Jain, Vice Chancellor, BITS Pilani and Raju Reddy, Chairman, BITSAA, in the presence of His Excellency the Governor of Goa, Shri Bharat VirWanchoo and Shri J Satyanarayana, Secretary, Department of IT, Government of India. The Chancellor of BITS Pilani, **Dr. Kumar Mangalam Birla**, says, "The launch of BITSCONNECT 2.0 from its three campuses in India signals a significant step forward that extends the boundaries of technology-enabled learning. The Telepresence system provides avenues for research collaboration and knowledge sharing among BITS' faculty and students, and for face-to-face communication between members of BITS' leadership."

→ Telepresence classroom



academia : a confluence of ideas

Seminars / Conferences / Workshops / Training Programmes

BITSMUN (8 – 10 February 2013)

The fifth edition of BITSMUN, one of the biggest MUN conferences in India, was held in BITS Pilani. BITSMUN 2013 simulated councils such as the General Assembly (GA), Economic and Social Council (ECOSOC), Futuristic Military Staff Council of UNSC, World Intellectual Property Organization (WIPO), Organization of Islamic Cooperation (OIC) and also the Game of Thrones Council. Apart from the committee sessions, BITSMUN also had the Speakers' Conclave and Rock Nite. The Speakers' Conclave had Dr. Vikas Asawat, a patent attorney from the Chandigarh High Court circuit, as the first keynote speaker. In his talk, he gave a broad idea about patent regulations in India and expanded on current IP regimes across the world and ways to bridge gaps to create a uniform system for IP laws. The second keynote speaker in the Speakers' Conclave was Dr. Sheel Kant Sharma, a former Secretary General of SAARC. He spoke about the current challenges faced by the Government of India in the diplomatic field.

National Workshop on Modeling and Computation

(23 – 24 February 2013)

Department of Mathematics, BITS Pilani organized a National Workshop on Modeling & Computation during 23-24 February 2013. Dr. Sunita Gakkad from IIT Roorkee was the chief guest and she delivered a lecture on Mathematical Modeling. Prof. G Raghurama, Director of BITS Pilani, was also present on this occasion. Dr. B V Rathish Kumar from IIT Kanpur was also present. In laboratory presentation, Prof. Sai Jagan Mohan of Mechanical department presented a demonstration of MATLAB and Ms. Priya Sande

gave a demo of "Fluent Software". Prof. Karmeshu, J.N.U. Delhi, exhibited the demonstration of Stochastic Modeling. Prof. Ashish Tiwari, BITS faculty also addressed the participants and mentioned how workshop proved to be a rich intellectual experience in terms of innovative knowledge in the field of mathematics. Dr. Dilip Kumar Maiti was the convenor of the workshop.

Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE 2013)

(22 - 23 March 2013)

A Workshop on Analytical Instruments for Chemical and Environment Engineers was organized jointly by the department of Chemical Engineering, BITS Pilani and IChE Pilani Regional Center. Dr. Siddharth S Ray, Senior Principal Scientist, IIP – Dehradun was the chief guest. Director, Prof. G Raghurama was also present on the occasion. It was a two day workshop to equip the participants with skills and train them to use a newer technology which though sophisticated, is user friendly. It was divided in two sections, firstly the lectures by eminent people and then presentations and practical demonstrations. The number of participants was limited to 30 only so that they can make the most out of it. Dr. Prateek Seth, one of the conveners – welcomed all the participants..Chairperson and the HOD, Dr. Suresh Gupta then elaborated on the myriad research areas-industrial safety ,process dynamic and control, polymer science and petrochemicals. He then highlighted the research achievements of the faculty members and also mentioned the huge amount they have received as grants by the external Funding Agencies.

→ WAICEE 2013



International Workshop on Data Analytics & Applications 2013 (IWDA) (26 February - 1 March 2013)

Inaugurated by Prof. B N Jain, Vice-Chancellor, BITS-Pilani along with Prof. G Raghurama, Director, Pilani campus and Prof. K E Raman, Director, KK Birla Goa Campus through Telepresence facility, the Workshop was successfully held at BITS Pilani, KK Birla Goa Campus from 26 February to 1 March, 2013. Jointly organized by Departments of Computer Science and Information Systems of Pilani and KK Birla Goa campuses, IWDA attracted more than 50 external participants and 41 BITS students and faculty. Prof. Navneet Goyal, Prof. Sundar Balasubramaniam, Prof. Poonam Goyal and Prof. Bharat M Deshpande were the coordinators of the workshop.

The conference provided a forum to the participants to learn about many ongoing trends and research problems in the field of data analytics. Out of the 13 speakers, 6 were academicians, 3 scientists, 2 entrepreneurs and 2 representatives from industry. Few participants from Pilani and Hyderabad campuses also attended the workshop via the Telepresence facility.

The first day was dedicated to ongoing and future trends in data analytics and the second day was devoted to diverse applications of data analytics. There were speakers talking about challenges and innovative solutions for efficient web mining and information retrieval. The focus was also on High Performance Computing and its ever increasing role in solving Big Data related problems. This four day long workshop not only enhanced participants' knowledge in concerned fields but also gave them ample opportunity to interact with experts.

Prof. V Lakshminarayanan Oration Lecture (11 January 2013)

Padmashri Dr. G N Rao graced the premises of BITS Pilani on 11 January to deliver a lecture on the occasion of 6th "Prof. V Lakshminarayanan Oration Lecture". Dr. Rao, founder and head, LV Prasad Eye Treatment Center, Hyderabad addressed on the topic, Research, Education and Public Good. In his address, Dr Rao spoke about many Institution groups working for eye treatment, which he has established with the help of localities in various towns and villages. He mentioned Andhra Pradesh, where LV Prasad Eye Treatment Center has established over 100 branches, in which around 1.5 crore patients have been successfully treated.

→ Prof. B N Jain addressing in VLN's Lecture



In his opening address the Vice-Chancellor, Prof. B N Jain talked about the long and memorable association of Prof. V Lakshminarayanan with BITS Pilani and highlighted his invaluable contributions in integrating the different colleges of Arts, Science, Pharmacy and Engineering in Pilani, and in the shaping of a new World Class University, BITS Pilani.

visits by faculty: enriching the learning experience

International Visits

Dr. K.S. Bhattacharya presented a paper on “**Disnarrating the Events of 1857: Reading J.G. Farrell’s *The Siege of Krishnapur***” at the Tufts University, during 44th Annual Convention, Northeast Modern Language Association (NEMLA), in Boston, MA held on 21-24 March 2013.

Dr. Shilpi Garg presented a paper on “**Novel point mutations in the antifolate drug resistance marker genes among *Plasmodium vivax* isolates exhibiting severe manifestations**” at the International conference on Advances in *Plasmodium vivax* malaria research held at Cosmocaixa, Barcelona, Spain during 28-29 May 2013.

Dr. Vishal Saxena presented a poster on “**Characterization of the Nuclear Encoded Hypothetical Proteins Targeted to the Apicoplast in *Plasmodium vivax***” at the International conference on “Advances in *Plasmodium vivax* malaria research” held at Cosmocaixa, Barcelona, Spain during 28-29 May 2013.

Dr. Navneet Goyal visited National University of Singapore (NUS), Singapore to deliver an invited

talk on “**Predictive Modeling for Multivariate Time-series Data**” in the 3rd South Asia Workshop on Research Frontiers in Computing, held from 28 to 31 May 2013.

Dr. Shivi Agarwal visited and presented a paper on “**Data Envelopment Analysis with Fuzzy Data**” at International conference on Applied

→ Dr. Shivi Agarwal



Mathematical Modelling (ICAAMM-2013) held at Yildiz Technical University, Istanbul, Turkey during 2-5 June 2013.

Dr. Rakhee visited and presented a paper on “**Performance Analysis of Cellular Mobile Radio System Based on Prioritized Channel Assignment**” at the International Conference on Applied Analysis and Mathematical Modelling, (ICAAMM2013) held at Yildiz University, Istanbul (Turkey) during 2-5 June 2013.

Dr. Javid Ali delivered an invited talk at the “**International Conference on Applied Analysis & Mathematical Modeling**” held at Yildiz Technical University, Istanbul, Turkey during June 2-5, 2013.

Dr. S Sindhu attended the “**International conference on Materials for Advanced technologies**” in Singapore, held on 30 June – 5 July 2013.

Dr. Rakesh Choubisa visited three Institutes in Europe for 6 months as a Marie Curie Researcher in the International project “FP7-People-IRSES MSNano network”, which is being sponsored by European Commission under its International Research Staff Exchange Scheme (IRSES). He visited Universite de Rennes, Rennes (France), Academy of Sciences of the Czech Republik, Prague (Czech Republic) and Instituto Nazionale de Fisica Nucleare, Frascati, (Italy).

He contributed in the project as a Work Package leader on the impact of spectroscopies.

Dr. Subhashis Gangopadhyaya visited Institute of Solid State Physics, University of Bremen, Germany for the period May-June 2013. He also presented a paper on “**Conformational and Orientational Ordering in 2D Superlattices of Brominated Porphyrins**”, in Interdisciplinary Surface Science Conference (ISSC-19): East Midlands Conference Centre, Nottingham, UK from 3-7 March 2013.

invited lectures by faculty

Dr. Subhashis Gangopadhyay delivered a talk on “Evolution of Ge quantum dots on clean and H nanopatterned Si(110) surface”, during annealing: a STM investigation: 100th Indian Science Congress, University of Calcutta, Kolkata 3-7 January 2013.

Dr. Sangeeta Sharma delivered a talk on “Effective Communication Skills” for teachers and students of Sangam University, Bhilwara, 13 January 2013; “Role of communication in Knowledge management” in MNIT Jaipur on 8 April 2013; and a special talk during Mid Service Training Programme for IOFS officers of JAG grade on “Presentation Skills” at National Academy of Defence Production, Ambajari, Nagpur on 12 April 2013. Invited as resource person for three days translation workshop on Rajasthani Vatas into English on 23-25th February, 2013 at Maharaja Ganga Singh University, Bikaner.

Dr. Javid Ali gave an invited talk at National Workshop on “The Fuzzy Sets & Fuzzy Logic” FUZZY-13 on ‘Various concepts of fuzzy metrics and applications’ in Govt. E. Raghvendra Rao Science PG College, Bilaspur (CG) held on 1-2 February 2013.

Prof. C B Gupta delivered a talk on ‘Role of Sterilization in family planning program’ at the International conference on Technology Innovation through Modern Engineering Science in the Institute of Engineering and Technology, Alwar on 24 February 2013.

Dr. S Sindhu delivered a talk on “Science A wonderful World”, at the Department of Education, Kerala University, Kerala, on 25 February, 2013.

Prof. Poonam Goyal conducted an International Workshop on Data Analytics & Applications

→ Prof. Poonam Goyal



(IWDA 2013) from 26th February to 1st March, 2013 in BITS Pilani-KK Birla Goa Campus.

Dr. Rakhee conducted a workshop on MATLAB Software Workshop at the IIS University, Jaipur on 17-18 March 2013.

Dr. Shivi Agarwal delivered an invited talk at the training lecture at MATLAB Software Workshop at the IIS University, Jaipur on 17-18 March 2013.

Dr. Navin Singh delivered an invited talk on "Physics of Biological systems" in a workshop on 15th INSPIRE Science camp for school children at Center for development of Physics education (CDPE), Physics department, University of Rajasthan on 30 March 2013.

Prof. S B Singh delivered a keynote lecture on "Advance Composite Material for Structural Applications" at MNIT Jaipur on 12 June 2013;

→ Prof. S B Singh



"Philosophy and Practice of Maintaining Industrial Structures" at Bokaro Steel Plant, Bokaro, Jharkhand on July 16-17, 2013.

Dr. Anshuman Dalvi delivered an invited talk on "Thermal studies on materials: A case study on superionic glasses", during "Short term course on Characterization of Materialism" at Malaviya

National Institute of Technology, Jaipur, from 17-22 June 2013. He also delivered an invited talk on Science in India: Glorious past and challenges delivered in a workshop on 15th INSPIRE Science camp for school children at Center for development of Physics education (CDPE), Physics department, University of Rajasthan on 30 March 2013.

Dr. A K Digalwar delivered a lecture on "Lean Manufacturing: Waste Elimination for Productivity Improvement" at JDIET Yavatmal (MS) on 25 June 2013.

Dr. Tapomoy Guha Sarkar delivered an invited lecture on "General Theory of Relativity" in the SERC Preparatory School on High Energy Physics, Tezpur University Assam during 1 July - 13 July 2013.

Dr. Amol Holkundkar delivered an invited lecture on "Proton acceleration by circularly polarized traveling electromagnetic wave" at Bhabha Atomic Research Centre, Mumbai on 8 July 2013.

Prof. Rahul Banerjee delivered a keynote lecture on "A Scalable Ubiquitous Computing Environment for the Elderly" at "UC 2013: Workshop on the Internet of Things" organised by C-DAC and JNTU, Hyderabad on July 13, 2013.

Dr. Amit Kumar Verma delivered an invited lecture on "Calculus via Mathematica" for DST

→ Dr. Amit Kumar Verma



Inspire Camp in SRIMT, BKT Lucknow on 14 July 2013.

Prof. Navneet Goyal was invited to participate in the Inaugural University of Illinois at Urbana-Champaign (UIUC) -Strand Life Sciences - ICTS(TIFR) CompGen Discussion Meeting and ITRA Strategy Formulation Meeting on Challenges in Genomics and Computing during July 22-24, 2013. ICTS-TIFR, IISc campus, Bangalore.

Dr. R P Pareek delivered an invited talk on "Effective Utilization of Web search Engines: An Approach for Medical Practitioners," during

→ Dr. R P Pareek



International Conference on Empowering Women in Developing Countries through Information and

Communication Technologies in the 68th Annual Conference of Association of Physicians of India (API), during 30 Jan. - 3 Feb. 2013, held at Codissia Trade Fair Complex, Coimbatore, India; An invited talk on “Community & Individual Health: Empowering Women through ICT” Organised by Centre for Women Studies, Dept. of Humanities & Social Sciences Jaypee University of Information Technology-Waknaghat, Solan & Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi in collaboration with IWID & READ-India at JUIT, Waknaghat, Solan, Himachal Pradesh, India during 1-3 June 2013.

Dr. Devika delivered two lectures on “Soft Skills” on 3 May 2013 in the UGC Orientation Programme-12 held at Academic Staff College, Guru Jambheshwar University of Science & Technology, Hisar.

significant projects

S.No.	Principal Investigator and Name of the Department	Title of the Project	Funding Agency	Amount and Duration
1.	Mathematics	Infrastructure	UGC	INR 20.00 lakhs
2.	Dr. Jitendra Panwar Biological Sciences	Molecular studies on extracellular biosynthesis of metal nanoparticles	DST	INR 45.50 lakhs 3 years
3.	Prof. S B Singh Civil Engineering	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	DST	INR 23.50 lakhs 3 years
4.	Dr. Rajeev Sakhuja Chemistry	Novel α -Amino, α -Aminoxy and α -Hydrazino acids linked Bio-conjugates: Design, Synthesis and Biological Evaluation	UGC (Start Up)	INR 6.00 lakhs 2 years
5.	Dr. Surojit Pande Chemistry	Size-Dependent Hydrogenation Catalysis with Mono-(Pd and Pt) and Bimetallic (Pd@Pt) Nanoparticles in Quantum Dot Region	UGC (Start Up)	INR 6.00 lakhs 2 years
6.	Prof. Rajiv Gupta Civil Engineering	Facility management using GIS and Genetic algorithm	DST	INR 19.99 lakhs 2 years
7.	Dr. Santosh Padhi Biological Sciences	Enzyme Catalyzed Kinetic Resolution of (a) Racemic Amidoalkyl naphthols and (b) Racemic 1-Amidomethyl-Imidazo[1,2-1] Pyridines	UGC (Start Up)	INR 6.00 lakhs 2 years
8.	Dr. Rajiv Taliyan Pharmacy	Implication of Glycogen Synthase Kinase-3 and Histone Deacetylase inhibitor in neurological disorders associated insulin resistance syndrome	UGC (Start Up)	INR 6.00 lakhs 2 years

S.No.	Principal Investigator and Name of the Department	Title of the Project	Funding Agency	Amount and Duration
9.	Dr. Shamik Chakrabarthi Chemistry	Design of new ionic receptor molecules derived from Schiff Bases: syntheses and their spectroscopic and theoretical characterization	UGC (Start Up)	INR 6.00 lakhs 2 years
10.	Biological Sciences	DRS-SAP-II Biological Science	UGC	INR 70.75 lakhs 5 years
11.	Dr. Anil Kumar Chemistry	Exploration of novel ionic liquid-supported sulfonyl reagents for organic synthesis	CSIR	INR 12.76 lakhs 3 years
12.	Dr. Anil Bhanudas Pharmacy	Understanding the epigenetic regulation in modulating inflammatory response mediated by NF-kb through AT1 and AT2 receptor in type II diabetic nephropathy	DST-SERB	INR 19.41 lakhs 3 years
13.	Dr. Rajdeep Chowdhury Biological Sciences	The role of Hippo signaling pathway components in autophagy regulation in hepatocellular carcinoma	DST-SERB	INR 24.05 lakhs 3 years
14.	Dr. Santosh Padhi Biological Sciences	Engineering baliospermum montanum hydroxynitrile lysase for potential synthetic and industrial applications	DST-SERB	INR 25.00 lakhs 3 years
15.	Dr. Suresh Gupta Chemical Engineering	Removal of Heavy metals from industrial wastewater using metallic nanoparticules as absorbents	DST-FT	INR 21.47 lakhs 3 years
16.	Dr. Shrinivas Arkatkar Mechanical Engineering	Study of Traffic flow characteristics on expressways	DST-FT	INR 21.74 lakhs 3 years
17.	Dr. Pratik N Seth Chemical Engineering	Production of Hydrogen rich fuel gas from Jatropha residue cake	DST-FT	INR 24.90 lakhs 3 years
18.	Dr. Pradipta Chattopadhyay Chemical Engineering	Evaluation and enhancement of foam stability of eathonol based aqueous foam using commercial surfactant sodium lauryl sulfate	DST-FT	INR 25.00 lakhs 3 years
19.	Dr. Yash Sharma CS/IS	Design and Development of opinion mining framework	DST-FT	INR 13.26 lakhs 3 years
20.	Dr. Rajneesh Kumar EEE & I	Design, development and implementation of a building integrated photovoltaic system for rural application	State Innovation Council	INR 43.29 lakhs 3 years
21.	Dr. Rajeev Taliyan Pharmacy	Exploring nertoprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke	DST-FT	INR 25.00 lakhs 3 years
22.	Dr. Tufan Bera Mechanical Engineering	Characterization of surface errors in machining of thin-walled curved geometries	DST-FT	INR 24.09 lakhs 3 years
23.	Dr. Sachi Singh Biological Sciences	Enhancing phytochemical production by the use of elicitors	DST	INR 21.80 lakhs 3 years
24.	Dr. Anil Bhanudas Pharmacy	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type-2 Diabetes	DST	INR 39.66 lakhs 3 years

S.No.	Principal Investigator and Name of the Department	Title of the Project	Funding Agency	Amount and Duration
25.	Chemistry	DRS-SAP Level II	UGC	INR 70.00 lakhs 5 years
26.	Dr. Suresh Kumar Mathematics	Dark energy modeling of cosmic acceleration with observational constraint in Einstein gravity and modified theories	DST	INR 14.16 lakhs 3 years
27.	Dr. Surojit Pande Chemistry	Synthesis and characterization of Metal Oxide Core- (Metal) shell nanoparticles in quantum dot region and their application in electrocatalysis	DST	INR 24.93 lakhs 3 years
28.	Dr. Rajeev Sakhuja Chemistry	Design of synthetically tunable azino-fused chromene conjugates as potential organogelators	DST(SERB)	INR 24.70 lakhs 3 years
29.	Dr. Geetha B Humanities and Languages and Prof. Shan Balasubramanian CSIS	A Digital Humanities Approach to Interpret the Visual Culture of Shekhawati Region	BITS (seed grant)	INR 13.90 lakhs 2 years
30.	Dr. Pushp Lata Humanities and Languages	Transforming Language Learning with New Technologies for Enhancing Employability of College Students from Rural Background	UGC	INR 8.94 lakhs 2 years
31.	Dr. Devika Humanities and Languages	Development of Listening and Speaking Modules of English Language through Multimedia Lab for Rural Students of class XI-XII	UGC	INR 4.09 Lakhs 2 years
32.	Dr. Sushila Shekhawat Humanities and Languages	Cchematic Arts: A Critical study of Interdisciplinary Aspects of Cinema with special reference to Literature, Audio Visual and Performance	UGC	INR 5.54 lakhs 2 years
33.	Dr. Virendra Singh Nirban Humanities and Languages	Study of Awareness, Uses and Implications of Web 2.0 for Supplementing Classroom Teaching at Graduate Level	UGC	INR 7.89 lakhs 2 years
34.	Dr. Anil Gaikwad Pharmacy	Effect of Esculetin on Angiotensin II in rat thoracic aorta under hyperglycaemic and hyperinsulinaemic conditions	UGC	INR 13.43 3 years
35.	Dr. Leela Rani and Dr. Jyoti Management	Investigation & Development of an ICT Driven MIS for Small Milk Producers.	BITS (seed grant)	INR 3.20 20 months
36.	Dr. Leela Rani Management	An Empirical Study on Impact of Information and Communication Technology on Productivity in Small and Medium Textile Enterprises of Rajasthan	UGC	INR 6.54 lakhs 3 years
37.	S Sindhu Physics	Preparation and characterization of thin films of electrochromic conducting polymer and fabrication of prototype smart pixel displays	Council for Scientific and Industrial Research, New Delhi	INR 11.00 lakhs 3 years

S.No.	Principal Investigator and Name of the Department	Title of the Project	Funding Agency	Amount and Duration
38.	Amol Holkundkar Physics	Study of laser interaction with atomic clusters and preformed plasma	DST, New Delhi (Fast track scheme)	INR 14.00 lakhs 3 years
39.	Tapomoy Guha Sarkar Physics	The study of post-reion ization HI distribution using the redshifted 21-cm signal and Ly-alpha forest towards understanding cosmic acceleration	DST, New Delhi (Fast track scheme)	INR 11.34 lakhs 3 years
40.	Gautam Singhvi Pharmacy	Studies on design and characterization of multi-unit controlled release dosage formulations of milnacipran hydrochloride, in vitro release mechanism and in vivo pharmacokinetic parameters in animals	UGC, Minor research project.	INR 1.40 lakhs 2 years.
41.	Shvetank Bhatt Pharmacy	Neuro pharmacological investigation of novel quinoxaline carboxamide novel serotonergic modulation for their antidepressant and anxiolytic activity	UGC	INR 2.00 lakhs 2 years
42.	Dr. Kamallesh Kumar Civil	Strengthening of local soil using fly ash	UGC	INR 2.00 lakhs 6 months
43.	Dr. Banasri Roy Chemical	Developing Metal Doped Bismuth Vanadate (BIMEVOX) Systems for Fuel Cell and Catalytic Applications	BITS Pilani	INR 2.00 lakhs 2 years
44.	Dr. A K Digalwar Mechanical	Development and Validation of Sustainability Measurement Framework for Manufacturing Industries	UGC, New Delhi	INR 3.50 lakhs 2 years

distinguished lectures at BITS Pilani

S.No.	SPEAKER	DESIGNATION AND ORGANIZATION	TOPIC	DATE
1.	Prof. Manfred Schneider	Professor, Department of Organic Chemistry at the Bergische Universität, Wuppertal, Germany	Enzyme - assisted syntheses of bioactive molecules. Biocatalysis for bio-based products: using lipases and novel oleochemicals for the preparation of combination products from renewable.	24 January 2013 25 January 2013
2.	Prof. Govindan Rangarajan	Professor, Mathematics Department, IISc, Bangalore	Are You Connected? Detecting Connectivity Patterns in Networks	21 March 2013
3.	Dr. Dwaipayan Bharadwaj	Senior Principal Scientist & Director- Indian Biochild Program, Genomics & Molecular Medicine Unit, CSIR-Institute of Genomics & Integrative Biology (South Campus)	Divulging genetic basis of type 2 Diabetes and other related disorders	9 April 2013

academic attainments of faculty

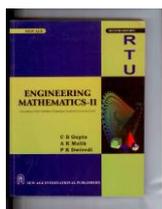
Editorial / review work, members of editorial board or other committees - appointed during January -July 2013

S.No.	NAME	DEPARTMENT	JOURNAL / MEMBER DETAILS
1.	Prof. C B Gupta	Mathematics	Appointed editor in chief for the proceedings of the 3 rd annual international conference on operations research and statistics held at Singapore during 3-4 April 2013; Appointed as associate editor for the Journal of Mathematics, Statistics and Operations research published from Singapore since 6 January 2013. Reviewed one research paper for International Journal of Mathematics in Operational Research published by Inder Science and two research papers for Ganita Sandesh.
2.	Dr. S Sindhu	Physics	Nominated as Subject expert in the faculty selection committee of Dayananda Sagar College of Engineering. Reviewed a paper for Journal of Polymer Research (Springer).
3.	Dr. Amit Verma	Mathematics	Reviewed five research papers for American Mathematical Society (AMS) and two articles were reviewed for two journals of international repute: Hindawi and Springer.
4.	Prof. S B Singh	Civil	Reviewed one research paper for ASCE Journal of Composites for Construction; Nominated as Expert member of BIS committee for test methods on fibre reinforced cementitious composites; UGC Nominee for expert member of UGC-DRS (SAP) Advisory Committee of Andhra University, Vishakhapatnam for 2012-2017; Appointed as Program Co-ordinator UGC-SAP (DRS-I) from April 2012-March 2017; Acted as an Advisor to UPSC New Delhi for conducting Personality Test of Engineering Services Examinations Candidates.
5.	Dr. Anshuman Dalvi	Physics	Reviewed research papers for International Journal (Elsevier) Materials Science and Engineering B; International Journal (Elsevier) Solid State Ionics; International Journal (Springer) International Journal of Ionics.
6.	Dr. A K Digalwar	Mechanical	Reviewed one paper for Production Planning and Control Journal; Reviewed one paper for Journal of Modeling in management; Reviewed one paper for International Journal of Green Energy; Reviewed 5 papers for 6 th ISDSI Conference; Appointed as a Secretary General of Indian Subcontinent Decision Sciences Institute (ISDSI) of DSI, Georgia state University USA for two years (2012-2013); Appointed member, International advisory board for the international conference on technological innovation through modern engineering science 2013 held at IET Alwar during 23-24 February 2013; Appointed member, national advisory board of national conference on Recent Trends in Operations Research organized by Department of Applied Sciences, Amity School of Engineering and Technology, Delhi during 11-12 April 2013; appointed member, International Association of Engineers, Hong Kong. Membership no. 127265.
7.	Dr. Shivi Agarwal	Mathematics	Reviewed 2 papers for Internal Journal of Operational Research published by Inderscience and one paper for European Journal of Operational Research by Elsevier.
8.	Dr. Navneet Goyal	CSIS	Reviewed four papers for the ACM Compute 2013 conference in the areas of Data Analytics, Text Mining & Machine Learning.
9.	Dr. Jitendra Panwar	Biological Sciences	Reviewed one research paper for: Journal of Basic and Applied Science, Journal of Nanoparticle Research.
10.	Dr. Navin Singh	Physics	Reviewed one research paper for The Journal of Chemical Physics; Physica A: Statistical Mechanics and its applications; and one for Physics Letters.

S.No.	NAME	DEPARTMENT	JOURNAL / MEMBER DETAILS
11.	Dr. Kunal Bhattacharya	Physics	Reviewed a paper for the journal Fractals and joined the editorial board of the journal Frontiers in Physics
12.	Dr. Raj Kumar Gupta	Physics	Reviewed a paper for the Journal Colloids and Surfaces A: Physicochemical and Engineering Aspects (Elsevier).
13.	Dr. Pratik N Sheth	Chemical	Reviewed one research paper for African Journal of Agricultural Research.
14.	Dr. Rajiv Gupta	Civil	Reviewed papers for Journal of Building Performance; Indoor and Built Environment, SAGE Journals, UK; SCIENCEDOMAIN <i>international</i> , British Journal of Applied Science & Technology; Journal of Energy Engineering, ASCE; Journal of The Institution of Engineers (India) – Series A; Journal of Civil Engineering and Architecture; Journal of Energy Engineering, ASCE; Architectural Science Review, Sydney, Australia.
15.	Dr. Banasri Roy	Chemical	Reviewed a paper each for: Journal of Renewable and Sustainable Energy; Journal of Materials Science; Journal of the American Ceramic Society; Ceramics International; Materials Science & Engineering B ; Materials Letters.
16.	Prof. Rahul Banerjee	CSIS	Reviewed two papers for the IEEE Communications and IEEE Transactions on ITS.
17.	Rajesh Mehrotra	Pharmacy	Visited G0 unit of Okinawa Institute of Science and Technology, Onna son, Okinawa, Japan, from 13 July to 30 December 2013.
18.	Gautam Singhvi	Pharmacy	Reviewed two papers for Journal of Chronicles of Young Scientists
19.	Dr. Javid Ali	Mathematics	Reviewer of American Mathematical Society, USA; Referee for five national and international journals.
20.	Dr. Rakhi	Mathematics	Reviewed three papers for international journal of Mathematics in Operational Research (IJMOR)
21.	Dr. Navneet Gupta		Reviewed one paper for Materials and Design-an Elsevier International journal; one paper for 40th Int. Conference on Metallurgical coating and thin film; four papers for 3rd IEEE Int. Advanced Computing Conference (IACC-2013); one paper for 2nd IEEE Students' Conference on Engineering and Systems (SCES-2013).
22.	Dr. Sangeeta Sharma	Hum. & Lang.	Appointed as Member of Advisory Council of AIMS International; External member of Advisory Committee for CWS, M.D. University.
23.	Dr. Bhupendra Sharma	Mathematics	Appointed as a member of editorial board: Open Journal of Fluid Dynamics (OJFD)
24.	Dr. Devika	Hum. & Lang.	Appointed as Co-editor for journal of Education, GSTF, Singapore. Reviewed seven papers for Journal of Education. Reviewed three papers for International Journal of English & Literature.

in print

Engineering Mathematics II By C B Gupta, A K Malik and P K Dwivedi, New age International, New Delhi. 2013.



Communication for Engineers by Prof. Meenakshi Raman and Prof. Sangeeta Sharma, Oxford University Press. 2013.

Joining hands: MoUs

Sustaining its collaborative efforts, BITS signed several MoUs with Institutions in India and Abroad:

- With Medicit Institute of Medical Sciences (MIMS), Hyderabad to collaborate in developing technologies to provide affordable health care to people living in rural areas.

- With Mitacs Inc., Canada to develop and strengthen collaboration in the field of scientific and technological research through projects and activities with an emphasis on innovations and entrepreneurship.
- With OUP India Pvt. Ltd., New Delhi to collaborate specifically in the areas of petrochemical and chemical process engineering through credit courses, faculty development programmes, sponsoring technical events at the university, internship to BITS students, research engagements by way of leveraging university infrastructure and personnel for experimentation and augmenting skills on newer technologies.
- With International Centre for Biosaline Agriculture (ICBA), Dubai to strengthen the collaboration in the areas of biosaline and environment biotechnology, biodiversity, biosaline agriculture, nutrient management under stressed conditions and bioactive compounds by way of implementing students' project internship, joint research projects, exchange of information and visits.
- With Kirloskar Oil Engines Ltd., Pune to collaborate to run educational programmes to meet the human resource development needs of Kirloskar Oil Engines Ltd., Pune leading to specific degrees through its off-campus Work Integrated Learning Programmes.
- With USC Viterbi School of Engineering, USA to cooperate in the field of education, exchange of faculty and students and collaboration in scientific areas of mutual interest.
- With RAK medical & Health Sciences University, UAE to promote educational and scientific cooperation in collaboration with our Duabi Campus in areas such as medical microbiology and pathology, biopharmaceutical/pharmaceutical biotechnology, bioactive compounds – laboratory and analytical studies, health care and diagnostics by way of faculty exchange, joint research, exchange of information, visits, and joint organization of seminars and workshops.
- With New Mexico State University, USA to promote academic and research collaboration by way of exchange of information and academic publications, exchange of staff and students, co-advising thesis and dissertations, organizing joint workshops and seminars.
- With Mahindra and Mahindra, Nagpur to collaborate to run educational programmes to meet the human resource development needs of Mahindra and Mahindra, Nagpur leading to specific degrees through its off-campus Work Integrated Learning Programmes.

accolades and achievements

Prof. Sangeeta Sharma received distinguished Educator Award, 2013 by Discovery Education Media Pvt. Ltd, at Hotel Park, New Delhi.

Prof. C B Gupta was awarded with Glory of India 2013 award by India International Friendship Society, New Delhi. He was also listed in Marquis Who is Who USA 2013.

Dr. Subhashis Gangopadhyay won the logo competition for Interdisciplinary Surface Science Conference (ISSC-19), East Midlands Conference Centre, Nottingham, UK during 3-7 March 2013.

Dr. Navneet Gupta won the Best Paper Award in IEEE conference on Engineering and Systems, held at MNNIT, Allahabad, 12-14 April, 2013.

student round-up

S Sanjay Aathreyasa (2009C2PS709P) was selected as one of the 100 young leaders across the globe to become a **Startingbloc fellow** and

→ S Sanjay Aathreyasa



was invited to attend **Institute for Social Innovation 2013** held during 14-18 February 2013 at Los Angeles, U.S.A. Starting Bloc fellowship is an international fellowship programme, which connects emerging leaders who have exceptional leadership experience and demonstrate passion to blend social and economic value and educates them to drive social innovation across sectors.

Anjum Dhamija (2009B3A4604P) got BITSAA CEL Mantra award for social leadership 2013 in Pilani on 10 May 2013.

C Chandini (2012A3PS212P) was awarded first position in project of APOGEE 2013 under **Project Presentation** in BITS Pilani, Pilani Campus in March 2013. She also got the Shield for **Most Valuable Player** in Basketball in BOSM 2013.

Saurabh Verma (2012H112187P) was selected in the Summer School 2013 held at the NUS, Singapore during 27-31 May 2013.

Siddharth Seth (2009B4A3713P) received **Mantra Award for Outstanding Leadership** by the BITS Alumni Association (BITSAA) in BITS Pilani on 27 May 2013. He was selected for incubation at Massachusetts Institute of Technology Global Start-up Labs, during 17 June – 26 July, 2013. He was also selected as **Author of Change** by National Social Entrepreneurship Forum (NSEF) on 1 June 2013. He was invited to the **Rolex Leadership Forum** organized by Rolex Awards for Enterprise in NDMC Convention Centre, Parliament Street, Delhi on 26 November 2012.

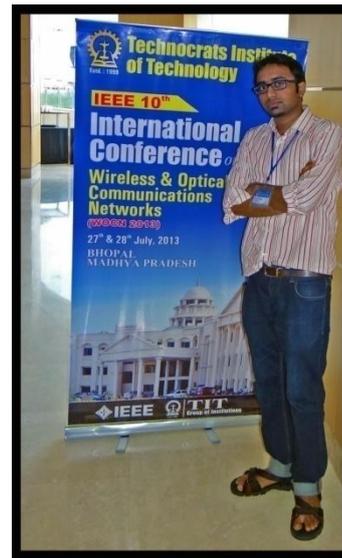
Siddharth Bhatia (2011B4A7680P) was selected to attend the **3rd South Asia Workshop on Research Frontiers in Computing** at School of Computing, National University of Singapore.

Sahil Bansal (2009A7PS132P) was amongst 30 students selected pan India for MIT AITI program sponsored by Google at BMS College of Engineering, Bangalore during 17 June - 26 July 2013. He worked on building an android app called CommuteBuddies, a crowd-sourced platform that allows users to find other commuters going on the same route so that they can share a taxi or an auto.

Prajakta Kiran Joshi (2012B1A3846P) got **KVPY (Kishore Vidyan Protsahan Yojana) Fellowship Award 2012** on 7 May 2013.

Kartic Bhargav K R (2009A3TS170P) participated in 10th International conference on Wireless and Optical Communication Networks during 26 - 28 July 2013, Bhopal, India.

→ Kartic Bhargav K R



The paper selected for presentation is to be indexed at the IEEE Digital Database under Conference Proceedings.

Ritvik Vasan (2011A4PS130P) got first prize for the project titled 'Cellphone microscope' in the category 'Design Appliances', Project, BITS Pilani, during APOGEE (15-19 March). He also stood second in the B-Plan competition ESPOIR for the cellphone microscope, ESPOIR, BITS Pilani, during APOGEE.

Akshay S Menon (2011A4PS093P) was awarded first prize in Project Prototype, category for **Design of Appliances for Cell Microscope/Spectrometer** and second prize for **Health B-plan** competition, ESPOIR during APOGEE 2013.

Bhawarth Sangwan (2010A1PS459P) won the prestigious **Prof. R P Vaid Award** for best outgoing Chemical Engg. student of BITS Pilani, Pilani Campus. He also secured 1st Position in Paper Presentation Competition (Chemical Engg. category), APOGEE-2013.

Bhawarth Sangwan (2010A1PS459P) and **Sonaal Bhanot** (2010A1PS448P) stood 2nd in Paper Presentation Competition (Chemical Engg. category), APOGEE 2013.

Bhawarth Sangwan (2010A1PS459P), **Sonaal Bhanot** (2010A1PS448P) and **Sumit Khanna** (2010A7PS109P) got 2nd position in Project Presentation Competition (Mathematical Modelling & Simulation category), APOGEE 2013 for the project "*Effective Benzene removal from high Naphtha using multi-objective optimization techniques*" in the event - Project Prototype Competition (Mathematical Modelling & Simulation Category), APOGEE-2013.

Mohit Bhardwaj (2012B5PS651P), **Vipin Sirigiri** (2010A2C6224P), **Akshit Gupta** (2011A2PS541P) and **Abhishek Kalantri** (2011A3PS189P) won first prize in the Event Equistrate, Child Welfare, in the **Tech Fest Cognizance** of IIT Roorkee on 23 March 2013.

Prateek Singhvi (2010B5A4677P), **Shubham Patodi** (2011C6PS780P), **Akshit Gupta** (2011A2PS541P) and **Himanshu Jain** (2011A4PS147P) participated in Techfest at IIT-Bombay, held on 4 January 2013 and secured 2nd position in the event: Ummeed, Ideate.

Pavan Kumar Chintakrindi (2012H149249P) was the winner of 2nd Prize in two events namely **Aviva Business Challenge** conducted on-line by Internshala.com and **Mark-e-brand** conducted on-line by Delhi School of Management.

Rishi Saharia (2010ABPS495P) was elected as the Vice- chairperson of Student District Operating Board, District G, Asia Pacific Region, American Society of Mechanical Engineers(ASME) in the event Student leadership seminar(SLS), in Student Professional Development Conference(SPDC) held during 11-12 March 2013 at KL University, Vijaywada. He was invited to SPDC District G held in Ipoh, Malaysia for felicitation. He has recently been appointed as the Chairperson of Student Board, ASME India Section.

Ravin Arora (2010A4PS573P) secured 1st Position for the paper titled Estimation of Process Capability Indices of Sequential Processes in paper presentation in APOGEE 2013 during 15-19 March 2013.

renewing the bond

BITSAA

Nine families of 1960-65 Batch of Alumni visited the campus on 18 February 2013. The visit was led by Shri Vinod Puri. The highlight of their visit in their own words was the interaction with the Director and the faculty.

Farewell to graduating students of 2009-13 batch was held at the VFAST lawns on 26 April 2013. Vice Chancellor called upon the students to make

their family and their institution proud. He also said that they should remember all those who helped them reach the present level. Inspiring every outgoing student to be the master of his/her future, Director, Prof G Raghurama quoted the famous American writer, Richard Bach "Every person, all the events of your life are there because you have drawn them there". The Director called upon the graduating students to find the beauty and happiness within and around them and wished them a successful life. Conveying his best wishes to the outgoing students, Prof. G Sundar, Deputy Director, said that he is confident that each one of them would be able to achieve their goals. He said that the Institute would look forward to seeing them come back to the alma mater to keep in touch. Dean of Students Welfare, Prof Arya Kumar called upon the students to give happiness to others, act joyfully and refrain from fear of failure in their work life and at the same time, take right decisions and adhere to them.

→ Prof. Narendra Ahuja getting BITS Pilani Distinguished Alumnus Award



Prof. Narendra Ahuja, an alumnus of 1972 batch from BITS Pilani and at present, Professor in the Department of Electrical and Computer Engineering at University of Illinois – Urbana Champaign, US was presented 'BITS Pilani Distinguished Alumnus Award' on Monday, 20 May 2013, in a function held at the VFAST Lawn of the Institute. Vice Chancellor Prof B N Jain presented the award. Speaking on the occasion, Prof Jain highlighted the outstanding contributions in academics and research in the area of computer sciences made by Prof. Ahuja. He invited Prof Ahuja to remain associated with the Institute and provide his support in whichever way possible including academic and research areas.

project embryo

Speaker	Designation and Affiliation	Title of the Talk	Date
Chinmay Kulkarni	PhD student in Stanford's Computer Science department	Human Computer Interaction	10 January 2013
Rakesh Komuravelli	Ph.D. student at University of Illinois at Urbana-Champaign (UIUC) (Computer Science BITS Pilani, 2006)	Today's hardware for safe parallelism	12 January 2013
Laxmanan Krishnamurthy	Director, Reporting Centre of Excellence of PayPal in India. (EEE from BITS Pilani, 1990)	Future of Money	12 January 2013
Arpit	Graduate in Computer Science from BITS, Pilani in 2011	Tele-immersive systems	13 January 2013
Vishwa	Currently pursuing his Masters from Johns Hopkins University (Graduate in Computer Science from BITS, Pilani, 2011)	Integration of Computer Science and Medicine	13 January 2013
Rizwan	Currently pursuing an MTech in CS at IIT Kanpur (with Bachelors in Computer Science, BITS, Pilani campus ,2010)	Algorithm (Advanced) Algorithm	13 January 2013
Rajat Tibrewal	Working with Google on multiple backend systems(M.Sc Physics with Computer Science, BITS Pilani, 2011)	What it means to run your DSA lab assignment at Google scale	14 January 2013
John C Mather	American astrophysicist, cosmologist Nobel Prize in Physics laureate for his work on the Cosmic Background Explorer Satellite (COBE) Ph.D. (Physics), University of California, Berkeley (NRC Postdoctoral Fellow), Columbia University Goddard Institute for Space Studies	General Talk on "Finding signs of life, Earth like planets, Einstein's biggest mistake, NASA's plans for next great telescope in space, Big Bang"	13 February 2013
Andrea Colaco	PhD student at the MIT Media Lab and an affiliate with the Research Laboratory of Electronics at MIT. (B.E in EEE from BITS Pilani in 2007)	Know Your University: MIT	16 February 2013
Prahar Mitra	PhD student in Physics at Harvard University. (M.Sc.) Physics (Hons.) with Engineering (B.E.) Electronics and Electrical (Hons.) from BITS Pilani	Know your University: Harvard University	16 February 2013
Subramanian Sundaram	An ABB-MIT Energy Fellow at MIT (B.E. degrees in Electrical Eng. and Mechanical Eng. , BITS Pilani (2005A3A4550P)	Know your university: MIT	16 February 2013

Speaker	Designation and Affiliation	Title of the Talk	Date
Ashok Ajoy	Final year in thesis school in IISc. Bangalore and Uni. Dortmund, Germany (Physics with EEE BITS Pilani, Goa Campus, 2010)	Know your university: MIT	16 February 2013
Ajay K Bhat	Graduate student at Cornell University pursuing a PhD in Physics (M.Sc.(Honors) Physics and B.E.(Honors) Electrical & Electronics Engineering)	Know Your University: Cornell University	17 February 2013
Dr. Abhishek Singh	Senior Environmental Scientist at Intera Inc. (B.E(Hons) Civil Engineering-BITS Pilani; PhD,M.S. Civil and Environmental Engineering-University of Illinois)	Groundwater Simulation	10 March 2013
Amlan Mukherjee	Associate Professor, Department of Civil and Environmental Engineering, Michigan Technological University (B.E(Hons.) Civil Engineering BITS Pilani; PhD, University of Washington)	Application of Information Technology in Construction	7 April 2013
Tarun Khanna	Professor Economics, Strategy and Innovation, Harvard Business School. Director, South Asia Initiative Harvard University. Former Board Member of AES Corporation, SKC Microfinance,GVK Bio Sciences and TVS Logistics	The Essence of Entrepreneurship in emerging markets	8 April 2013
Siddhartha Nath	Intel Technology India Pvt. Ltd. (B.E(Hons) Electrical and Electronics Engineering PHD CS, UCSD)	Know Your University-Computer Architecture	14 April 2013
Satish Polisetti	Adsnative, Picatcha Inc. Interned at ISRO, Qualcomm and Cypress USA. (B.E(Hons.) Mechanical Engineering & B.E(Hons.) Electrical Engineering; MS, Information Systems, UC Berkley)	Know Your University-Entrepreneurship and Project Management	14 April 2013
Gaelen Pereira	Silvus Technologies Interned with Qualcomm and Bharti Airtel (B.E(hons) Electrical And Electronics Engineering, BITS Pilani; MS.Electrical Engineering, UCLA)	Know Your University-Wireless Communication	14 April 2013

caring beyond our walls

Founder's day celebrated

The 62nd Founder's day was celebrated on Basant Panchmi with traditional grandeur in BITS Pilani. The Founder, Late Shri G D Birla was

→ Founder's day celebration



garlanded by the Vice-Chancellor Prof. B N Jain. It was followed by the Thyagaraja Aradhana organized by the Carnatic Musical Association, Ragamalika where students sang the five Pancharatna Kritis of Sage Thyagaraja.

→ Prof. G Raghurama felicitated the non-teaching staff



In the evening, there was a Founder's Day function and cultural program in auditorium. On this occasion, Prof. G Raghurama, Director, Pilani Campus, felicitated the 15 non-teaching recently retired and would be retiring staff. He also presented the Best Performance Awards to six non-teaching staff.

Science Day Celebration

Every year National Science Day is celebrated by our institute, to pay tribute to the great scientist and Nobel laureate Dr. C V Raman. Different competitions related to popular science were organized by departments of Physics, Chemistry and Biological Sciences such as a science quiz competition for the students of local schools, a "Treasure Hunt" event and a science quiz contest for the students of BITS Pilani, followed by a popular science lecture in the closing ceremony. In addition, there was a Documentary Screening named as "SCINEMA" about the life of an ultimate genius, R R Rife.

The science quiz competition for the local school children was held on 16th Feb. Eight teams from the four local schools participated in this contest. The students of the science departments also organized "Quizzometry" on 17 February 2013, a science quiz contest for the students of BITS Pilani. About 50 students participated in the event and finally, the two winning teams were awarded the prizes. *Treasure Hunt* for BITS students was held on 19th February. About 45 students participated in this hunt. The science quiz was followed by a short valedictory function in which a lecture on "Mysteries of the Universe" was delivered by Dr. Tapomoy Guha Sarkar from the department of Physics, BITS Pilani. Prof. R N Saha, Deputy Director, Research & Educational development, BITS Pilani, addressed the gathering and gave away the prizes for the different events.

NSS

The 32nd edition of Blood Donation Camp was successfully organized during 16-17 February in which a whopping 801 units of blood were collected at the end of the two day long camp with an overall turn up of 1173 people that has been

→ 32nd Blood Donation Camp



the highest till now. The camp was inaugurated by the Director, of BITS Pilani, Prof. G Raghurama. Other dignitaries including the Deputy Director (Administration) Prof. R N Saha, NSS Coordinator Dr. Anupam Singhal and other program officers of NSS were also present on the occasion.

The latest edition of DHITI proved to be a bigger socio-technical event as compared to its previous editions. 100 NGOs, more than 200 participants and extensive support/cooperation by BITS faculty ensured the success of the event. The final round was witnessed by Mr. Rajendra Singh, the famous water conservationist, who is also known as 'Waterman of India' and Dr. Chandrashekhar, Director CEERI Pilani. The feasible projects will be implemented through Project PARISHODH (an initiative by NSS and Nirmaan Organisation).

→ Campus Clean



A Cleanliness Drive with the theme "Reduce, Reuse and Recycle" was conducted on 13-14 April in our campus along with paper collection drive for the Project SAKSHAM. It saw a good participation of faculty members including the Director BITS Pilani and other dignitaries as well as a good number of students. Google Social Hackathon, the first ever such kind of an event at BITS Pilani was conducted in APOGEE 2013 on 16 March by NSS in collaboration with Nirmaan Organisation and Information System Association, BITS Pilani. A total of 31 teams comprising of 108 students from various colleges participated in the event. At the end of the event, 24 solutions including mobile and desktop applications were submitted.

Microsoft Technology Day (10 March 2012)

Microsoft Technology Day was celebrated at BITS Pilani on 10 March 2012. On this occasion, a free workshop was conducted by Mr. Prabhjot Bakshi, a Microsoft Certified Trainer and Application Developer from Ahmedabad, on "Windows Phone App Development" for the benefit of the students.

creative zone

MATRIX

The semester commenced for MATRIX with a review of the book "*The Garden of Solitude*", by Siddhartha Gigoo on 25 of January 2013. The discussion was further enriched by queries and inputs from faculty members and students who were present in the audience.

Matrix members also went to Jaipur to attend Literary Fest on 2 February, 2013. An Internal Book Review of the book "*The Kite Runner*" by Khaled Hosseini was conducted by the first year students. Like the previous years, MATRIX once again successfully conducted three events in APOGEE. The *MATRIX Mythology Quiz* was prepared by Prathamesh and Srungeer Simha. Also, a *Comic Writing Contest* was conducted, which involved writing of hilarious and witty lines between fictitious and real life characters. The third event *How It Should Have Ended (HISHE)*, was an online event. Participants were made to write their own ending to a book, which they had to choose from a list of books provided by Matrix. It received numerous excellent entries for the event.

On 5 April 2013, the author of the book "*The Garden of Solitude*", Siddhartha Gigoo was invited to give a talk on his book and a short film that he had made. The final book Introduction event of the year was conducted by the final year students on 15 April 2013. Samarth Sachdeva introduced "*How to get filthy rich in rising Asia*" by Mohsin Hamid. Avinas Upadhyay introduced "*India after Gandhi*" by Ramachandra Guha. Viknesh introduced "*The Perks of being a Wallflower*" by Stephen Chbosky and finally, Bhargav introduced "*Outliers: The Story of Success*" by Malcolm Gladwell.

The semester ended with the valedictory ceremony, attended by eminent guests and faculty from the institute like Prof. Arya Kumar, Prof. A K Sarkar, Prof. Geetha B, and Dr. M Ishwara Bhat.

Ragamalika

Ragamalika, the classical music and dance club of BITS yet again came up with stunning performances in the last semester. In Nriyaranjani, Anuragita, translating to Song of Love was the theme for the first major show presenting the various kinds of love people experience as they go through life. The dancers were a group comprising of only one senior and three freshers. The performance moved from

→ Ragamalika



maternal love to dramatic adolescent relationships to patriotism - each scene was very elegantly portrayed culminating in bhakti – love towards God – aptly explained through a dancer attaining nirvana. Freshers' Concerts another event, separately held for musicians and dancers in the two semesters, through individual performances was a formal introduction of the new members of the club. Violinists, vocalists, table players, Bharatanayam and Kathak dancers presented themselves in an extremely professional manner.

On Founders' Day, all the clubbers and non-clubbers alike congregated to sing Pancharatnakritis, composed by Thyagaraja, the genius whose compositions are still celebrated by every Carnatic musician. Another important event of the semester, Mithali saw the collaboration of Ragamalika with Music Club to perform the song 'Mere Dholna'. Sangamam, was the flagship event in which the confluence of the Panchabhootas turned out to be a beautiful theme for portrayal by a troupe of eight dancers. The five elements were depicted through elaborate formations and interweaving patterns.. The elements merging to form the grand cosmic form of the Almighty marked the end of the show. The semester ended with the last event Psenti Concert in which the performance of a stalwart of the club – Ajay Aditya Chandramouli – a versatile violinist and vocalist was the major attraction.

Apogee (13 – 15 March 2013)

The 31st technical festival of BITS Pilani, APOGEE 2013, began on 15 March in the auditorium with the introduction of the COSTAA body of the student run festival. It was followed by the customary lighting of the lamp by the Director BITS Pilani, Pilani Campus Prof. G Raghurama and the Chief guest, Dr. Atul Gurtu, a particle physicist who headed the team of Indian researchers involved in the Large Hadron Collider project at CERN. Dr. Gurtu has had an illustrious career at the Tata Institute for Fundamental Research and is one of the highest authorities in

the field of particle physics in India. He was presented with a memento by the director. U.R. Lohi, President of BITS Pilani, Students Union after presenting a memento to the director welcomed all the students to the festival and urged fellow students to do their projects well. He then highlighted the *Think Again conclave*. Prof. Raghurama in his speech stressed upon consistent performance in life –not only the destination but the journey too is important. "We must not forget those who helped us attain it. Accept challenges in life."

Dr. Gurtu mentioned that innovation is the only key to success, though it is tough because many people have already discovered so much. Before beginning any new thing, one should give a thought to it and then seek advice which will not make the task look unmanageable. And the last point being one should never become arrogant on achieving success. He then unveiled the structures of the department of Art, Design and publicity.

The main attraction of the event was Kaushal Bose, the sand artist who drew myriad of designs in the sand, including the logo of Apogee 2013, lord Krishna playing the flute. Nayan Goyal, the General secretary of BITS Pilani thanked everybody and declared the five day festival open.

The four day festival witnessed many events such as Hackathon, Chem-e-Car, Trouble Shooter, Junkyard Wars, Codestorm, Dhiti, Track-O-Mania. The Full Throttle Grand Prix, the other kernel event was about racing remote controlled cars. Beside these, there was mytho quiz, word stock, spelling bee, puzzled and other such events which were really fun since they simply tested your awareness. Still 'Think again', captured the limelight featuring four incredible speakers from four completely different walks of life namely Dr. Pawan Agrawal-the CEO of Mumbai Dabbawala Association, Piyush Pandey an influential man of the Indian Advertising Industry for eight years, Jeff Lieberman-host Time Warp and Devdutt Pattanaik-CBO Future group.

The sponsors included ACC (Title Sponsor), TATA&IDBI (Gold Sponsor), FoodKing, Woodland,Texas Instruments, UCO Bank(Silver Sponsor), Lenovo, Subway, NTMN, Cleartrip, Pepsi, CCD, Dominoz, and others.

Interface

Management Association of BITS Pilani organized the 36th Annual Management Fest Interface on 1st of February. The chief guest in the inauguration ceremony of this auspicious fest was Mr. Rajesh Tambe, a renowned market analyst. Prof. G Raghurama, Director, BITS Pilani, Pilani Campus

also was present during the ceremony. During the inauguration, Mr. Tambe took the opportunity to say a few inspiring words like “*Kar lo Duniya Mutthi mein!!!*” for all aspiring management students and wished them all the very best in future.

Interface provides a brilliant platform for students as well as professionals to put forward their innovative ideas and hone their managing skills, which is a must for any individual to run an organization. Around 250 students from 30 different colleges, including I.I.M. Ahmedabad and X.L.R.I., participated in this 3 days fest. Events like “Bulls & Bears”, “Budget Mogul”, “Nidaan”, “Pilani Media Conference”, etc. kept the enthusiasm of the participants going all along the fest.

UGC Centre for Women Studies

UGC Centre for Women Studies (CWS) has undertaken diverse range of academic and field activities with the objective of empowering women and upliftment of their families in the field of social, economic and health. The Centre organizes Conferences, Workshops and Training Programs and conducts research studies on issues of women and society. The Centre has initiated various activities during 2013.

→ Prof. Sangeeta Sharma



The UGC Centre for Women Studies organized a drawing competition on 23 February 2013 for the girls and women of the campus on “Women Empowerment”, the event was coordinated by Prof. Sangeeta Sharma, Coordinator, UGC Centre for Women Studies along with Ms. Madhusmita Das. The centre also organized a panel discussion on “Breaking the Culture of Silence for combating the violence against women” on 6 April, 2013. The Resource persons for this workshop were Mrs. Alka Bisaria Bhatnagar, and Mrs. Sonia

Shandilya, Lawyers, High Court Jaipur. The centre also celebrated the International Women’s Day on 9 March, 2013 in LTC Lawns, to pay respect and understand the importance of women in our life and to raise awareness. Prof. Sangeeta Sharma and Ms. Madhusmita coordinated the events. A study was also conducted by the centre on “The Role of Street Plays in Bringing a Social Change in Rural India” to address the problems and issues related to women especially in rural areas. The play was performed during Women’s day celebration.

NIRMAAN

Under the project, Shiksha ki Ore, efforts have been made to bring the kids to a level at par with their counterparts academically, 20 of them have joined some of the best English medium private schools around Pilani this year, free of cost under the provisions of the much talked about Right to Education Act.

→ Students of the Shiksha ki Ore project



Other education initiatives-Gyan Bodh, School Adoption program, Utkarsh and Disha have continued to consistently provide academic help to approximately 1000 students. This was done through a changed teaching pedagogy in an adopted government school, daily evening school, providing scholarships, career guidance and exposure trips.

The two SHGs (self-help groups) continued the production of bags, notebooks, kurtas and wall hangings for the local market and BITS Coop.

In collaboration with NSS, an earlier project ‘Parishodh’ was revamped with a new structure and promises to channel BITSians’ technical skills to solve problems.

Anjum Dhamija, ex-president of Nirmaan, has been awarded CEL Mantra Award for Outstanding Social Leadership - 2013.

introducing new faculty

S. No.	Name	Designation	Discipline
1.	Dr. Jammula Tirumala Rao*	VPRO	CHEM
2.	Dr. Paul Atish Tulshiram	ASTP	PHA
3.	Dr. Kapil	ASTP	CSIS
4.	Mr. Aquil Mirza Mohammed	LECT	EEE
5.	Dr. Sundaresan Raman	ASTP	CSIS
6.	Dr. Murali Palla	ASTP	ME
7.	Dr. (Mrs.) Shibani Khanra Jha	ASTP	CE
8.	Dr. Amit Goel	ASTP	CE
9.	Dr. Arun Kumar	ASTP	MGT
10.	Dr. S K Hafizul Islam	ASTP	CSIS
11.	Dr. Suresh Kumar	ASTP	MATH
12.	Dr. (Mrs.) Anubha Dadhich	ASTP	MGT
13.	Dr. (Mrs.) Sandya Amol Marathe	ASTP	BIO
14.	Dr. (Mrs.) Sudeshna Mukherjee	ASTP	BIO
15.	Dr. Benu Gopal Saha#	VFAC	CHEM
16.	Dr. Udayan Chanda	ASTP	MGT
17.	Dr. Mangal Roy	ASTP	ME
18.	Dr. Praveen Goyal	VFAC	MGT

* Transferred from Hyderabad.Campus

Re-appointment

editorial team



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Members of Editorial Committee: Dr. Virendra Singh Nirban and Dr. Sushila Shekhawat

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Pilani Campus

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